

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of: Hyun Woo SONG, et al.

Serial No.: New Application      Group Art Unit: Not Yet Assigned

Filed: March 16, 2004      Examiner: Not Yet Assigned

Title: METHOD FOR FABRICATING SEMICONDUCTOR OPTICAL DEVICE

**INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

March 16, 2004

Sir:

As a means of complying with the duty of disclosure under 37 CFR §1.56, and in accordance with 37 CFR §§1.97 and 1.98, Applicant(s), through the undersigned attorney, submits this Information Disclosure Statement. The patents, publications or other information submitted herewith are listed on the attached Form PTO-1449 and copies are attached.

In accordance with 37 CFR §1.97(b)(1) or (2), this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, or within three months of the date of entry into the national stage of the above-identified application as set forth in 37 CFR §1.491. Accordingly, no fee is required.

Respectfully submitted,

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## LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: P69577US0      GROUP ART UNIT: Not Yet Assigned  
 SERIAL NO.: New Application      FILING DATE: March 16, 2004  
 APPLICANT(S): Hyun Woo SONG et al.      TODAY'S DATE: March 16, 2004

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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	INT'L CLASS	SUB- CLASS	FILING DATE (If Appropriate)
AA	5,068,868	11/26/91	Deppe, et al.	H01S	3/19	5/21/90
AB	6,121,068	09/19/00	Ramdani, et al.	H01L	21/00	3/26/98
AC	5,711,811	1/27/98	Suntola et al.	C32C	16/00	11/28/95

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## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES) (NO)
AD	11-307863	11/05/99	JAPAN	H01S	3/18	X

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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AE Chao-Kun Lin, et al; "Electrically pumped 1.3 VCSELs with InP/air-gap DBRs"; CLEO '02 Lasers and Electro-optics, 2002.; pp. 755-757.

AF Chao-Kun Lin, et al; "High temperature continuous-wave operation of 1.3-1.55 um VCSELs with InP/air-gap DBRs"; IEEE 18<sup>th</sup> International Semiconductor Laser Conference 2002; pp. 145-146.

AG I.Gagnes, et al; "MOCVD InP/AlGaInAs distributed Bragg reflector for 1.55um VCSELs"; Electronics Letters 12<sup>th</sup> April 2001, Vol. 37, No. 8; pp. 500-501.

AH J.-H.Shin, et al; "CW Operation and Threshold Characteristics of All-Monolithic InAlGaAs 1.55-um VCSELs Grown by MOCVD"; IEEE Photonics Technology Letters, Vol. 14, No. 8; August 2002; pp. 1031-1033.

AI K. Streubel, et al; "1.26um vertical cavity laser with two InP/air-gap reflectors"; Electronics Letters 18<sup>th</sup> July 1996, Vol. 32, No. 15; pp. 1369-1370.

- AJ Hyun-Eoi SHIN, et al; "High-finesse Al<sub>x</sub>O<sub>y</sub>/AlGaAs nonabsorbing optical cavity"; Applied Physics Letters; Vol. 72. No. 18; May 4, 1998; pp. 2205-2207.
- AH Sun Jin Yun, et al; "Dependence of atomic layer-deposited Al<sub>2</sub>O<sub>3</sub> films characteristics on growth temperature and Al precursors of Al(CH<sub>3</sub>)<sub>3</sub> and AlCl<sub>3</sub>"; J.Vac.Sci. Technol. A 15(6), Nov/Dec 1997; pp. 2993-2997.

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).